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ABSTRACT

A Health Occupations Program designed as an integrated science course offers students at Evanston Township High School (Illinois) an opportunity to master science skills, content, and laboratory techniques while working and studying within local hospitals (the Evanston Hospital and St. Francis Hospital) as well as within their high school classrooms. Students must have completed a course in biology and must take a math and chemistry course in conjunction with the program. The first phase of this course (two days per week in the morning) involves students actually studying and participating within a hospital setting spending a total of 6 weeks per department in each of six areas of their choice. These departments include nursing, clinical laboratory, physical therapy, radiology, patient registration, respiratory therapy, blood gas laboratory, dietetics, central sterile services, and occupational therapy. Their instructors consist of the professional hospital staff. The second phase of this course (3 days per week in the morning) involves classroom work at the high school. Materials covered at this time reinforce that which is covered in the hospital with added topics such as medical ethics, medical careers, history of medicine, and the disease process. Their instructors consist of the high school professional staff. This course offers opportunities for community resources to interface directly with the high school student and its curriculum. Science integration (physics, chemistry, and life science) is achieved through the variety of areas available to the student both in a nontraditional setting, the hospital, as well as in a traditional classroom setting. The following materials are included: (1) courses objectives; (2) agreement hospital/high school; (3) agreement student/parent; (4) program rules and regulations; (5) student expectation form; (6) hospital rotation procedures; (7) evaluations of student performance; and (8) student responses regarding their program experiences. (ZWH)

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ED 369 648

# HEALTH OCCUPATIONS EXTENDED CAMPUS PROGRAM

## A Presentation to the NSTA Convention

## March 30, 1994

## 11:00 a.m. to 11:30 a.m.

## Orange County Ballroom Salon 4 Anaheim Marriott

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SE054354

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# THE NEWS

June 1983
Volume 17, Number 6

By and for the employees of the Evanston Hospital Corporation, which owns and operates The Evanston Hospital and The Glenbrook Hospital


# High School Students Get Hands-On Lessons

Amy Swift hopes to be a pediatrician someday and is working toward that goal as a pre-med student at Southern Illinois University. But her dreams of a healthcare career started when she was in high school, and they were nurtured through her participation in Evanston Hospital's partnership program with Evanston Township High School (ETHS).

The Health Occupations Extended Campus program, as it is called, brings high school students to a variety of Hospital departments, where they observe, work and learn. "The goal of the program is to introduce our students to the career opportunities available in the medical setting," says ETHS teacher Vivek Likhite, the founder and director of the program. "We want them to have appreciation for how hard healthcare work can be, to know its rewards, and be able to take responsibility."

Students who participate in the "Health Occ" program spend two hours a day, two days a week, working in such Hospital departments as research, phlebotomy, clinical laboratories, radiology, cardiac graphics, clinical sterile services, physical therapy, and occupational therapy, as well as in a variety of inpatient units. While participating in the year-long program, they will rotate through six areas.

The Health Occ program also has a structured academic component. On days when students are not at the Hospital, they spend two hours in Likhite's classroom studying advanced science topics such as human anatomy. "This program is available to students who have succesfully completed biology," Likhite says. "Potential participants must show an interest and demonstrate academic ability."

Nanette Snowden, M.P.H., M.T., laboratory education manager, is one of the many Evanston Hospital employees who participate in the ETHS Health Occ program. As an instructor with the Hospital's medical technology training program, Snowden welcomes the students who "rotate" through her department. "I believe the program benefits both sides," she says. "High school students learn a lot about what is involved in a healthcare career. They learn that our work environment is both professional and pleasant. We benefit by bringing in interested and bright young people who often pursue careers in a health-related field."

Cindy Nierodzik, R.N., nurse manager, Spine Center, is an employee who participated in the Health Occ program when she was a senior at ETHS. "In high school, I had a pretty good idea that I wanted a healthcare career," she says. "But participating in the Heath Occupations program reinforced my desires and gave me a good look at what working in a hospital was all about."

Amy Swift recalls that the Health Occ program helped her to focus her goals. "I had the opportunity to work in the Women's Hospital with high-risk mothers and their babies," she says. "Working around the infants had a strong effect on me. It made me realize that I'd like a career helping children."

ETHS senior Michael Ben-Avraham, who just completed the Health Occ program, found it very beneficial. "It gave me the chance to have hands-on experience that I would not have in the classroom," he says. "Participating in this program was a good way to see if I feel positive about the medical field. It was a rewarding aspect of my high school experience."

Gloria House (right), cardiac graphics, explains aspects of the technology to student Ann Marie Martin.

Above: On 2 East, Catherine Schmitz, R.N., cares for patient Vincent Randazzo with help from Evanston Township High School student Korrin Young.

Left: Nanette Snowden, M.P.H., M.T., laboratory education manager, explains microscope techniques to students Daniella Ben-Avraham and Smith Joseph.

## ABSTRACT

A Health Occupations Program designed as an integrated science course offers students an opportunity to master science skills, content, and laboratory techniques while working and studying within a local hospital as well as within their high school classroom.

The first phase of this course (two days per week in the morning) involves students actually studying and participating within a hospital setting spending a total of six weeks per department in each of six areas of their choice. These departments include nursing, clinical laboratory, physical therapy, radiology, patient registration, respiratory therapy, blood gas laboratory, dietetics, central sterile services, and occupational therapy. Their instructors consist of the professional hospital staff.

The second phase of this course (three days per week in the morning) involves classroom work at the high school. Materials covered at this time reinforce that which is covered in the hospital with added topics such as medical ethics, medical careers, history of medicine, and the disease process. Their instructors consist of the high school professional staff.

This course offers excellent opportunities for community resources to interface directly with the high school student and its curriculum. Science integration (physics, chemistry, and life science) is achieved through the variety of areas available to the student both in a nontraditional setting, the hospital, as well as in a traditional classroom setting.

| | |
|---|---|
| Course Title: | Health Occupations Extended Campus |
| Course Number: | CO0752<br>CO0753 - Honors |
| Course Length: | One Year |
| Year Offered: | Junior (2 periods daily) |
| Credits: | Four |
| Prerequisites: | a. Recommendation by counselor, program coordinator, and department chairperson.<br><br>b. Student must have completed a course in biology.<br><br>c. Student must take a math and chemistry course in conjunction with the program. |
| Textbook: | Human Biology, Sylvia Mader |
| Course Description: | |
| Phase 1 | Instructional activities will be designed to broaden the student's knowledge of the various health career fields. The course will consist of classroom and laboratory investigation. |
| Phase 2 | The students and instructor will move from the local school to the extended campus facilities for planned laboratory experiences. Students will be rotated between many departments of the hospital, which include Departments of : Pathology, Laboratory medicine, central Sterile Services, Nursing, Radiology, Physical Therapy, Cardiac Graphics, Patient Registration, and others.<br><br>Instruction at the hospital will be provided by the hospital's personnel. These activities will be coordinated with the classroom objectives.<br><br>Each semester the student earns one science laboratory credit and one Applied Arts credit for the extended campus experiences. |

HEALTH OCCUPATIONS EXTENDED CAMPUS

Course Objectives:

1. To introduce the student to the facilities which are part of the health care system, and to the occupations within these facilities.

2. To acquaint the student with some specific tasks associated with the various occupations.

3. To provide the student with an opportunity to learn directly from health care personnel by observing and questioning them as they perform their daily assignments.

4. Through participation in medical orientation experiences students will be exposed to a wide range of career options in the world of medicine. Students will become cognizant of their own strengths and weaknesses, aptitudes, capabilities, interests, and needs, to enable them to make a realistic assessment of themselves in relation to the career options available in medicine.

5. To develop and practice logical goal setting and decision making skills which will be useful to them throughout their lifetime in considering alternative career possibilities.

6. To provide students with an extensive medical background that enables them to adapt easily in various health career majors.

# AGREEMENT

WHEREAS, SCHOOL desires to utilize HOSPITAL for the purpose of providing an elective clinical experience for students of SCHOOL.

NOW, THEREFORE, it is understood and agreed upon by the parties hereto as follows:

A. SCHOOL RESPONSIBILITIES

1. SCHOOL shall have the total responsibility for planning and determining the adequacy of the educational experience of students in theoretical background, basic skill, professional ethics, attitude and behavior and will assign to the HOSPITAL only those students who have satisfactorily completed the prerequisite didactic portion of the SCHOOL's curriculum.

2. SCHOOL shall provide HOSPITAL with verification of health insurance coverage for its students who will be on HOSPITAL premises.

3. SCHOOL shall provide HOSPITAL upon request with medical information contained in student records required by the HOSPITAL in connection with the students' participation in this program. The SCHOOL shall require participating students and their parent(s) to sign forms authorizing release of this information to the HOSPITAL and any other information relevant to the students' participation in the program in accordance with the Student Records Act.

4. SCHOOL will designate a faculty member to coordinate and act as liaison person designee of the HOSPITAL. The assignment to be undertaken by the students participating in the elective experience will be mutually arranged, and a continuous exchange of information will be maintained by on-site visits when practical and by letter or telephone in other instances.

5. SCHOOL shall notify each student prior to his or her arrival that he or she is responsible for:

   a) Following the administrative policies, standards, and practices of the HOSPITAL.

   b) Providing the necessary and appropriate uniforms required by the HOSPITAL.

   c) His or her own transportation and living arrangements when not provided by the HOSPITAL.

   d) Reporting to the HOSPITAL on time and following all established regulations during the regularly scheduled operating hours of the HOSPITAL.

   e) Conforming to the standards and practices established by the SCHOOL while training in the HOSPITAL.

   f) Obtaining prior written approval of the HOSPITAL and the SCHOOL before publishing any material relating to the Clinical Education experience.

B. HOSPITAL RESPONSIBILITIES

1. HOSPITAL agrees to make the appropriate facilities available to SCHOOL in order to provide elective clinical experience to students in the program. Such facilities shall include an environment conducive to the learning process of the students as intended by the terms of this Agreement and conforming to the customary HOSPITAL procedures.

2. HOSPITAL does not assume any liability whatsoever for medical treatment or illnesses or injuries to students when they are on HOSPITAL premises.

3. Students are to remain subject to the authority, policies, and regulations imposed by the SCHOOL and, during periods of clinical assignment, students will be subject to all rules and regulations of the HOSPITAL and imposed by the HOSPITAL on its employees with regard to following the administrative policies, standards, and practices of the HOSPITAL.

4. HOSPITAL may cancel, by notice in writing to the SCHOOL, the clinical placement of any student whose performance is unsatisfactory, or whose health status is a detriment to the student's successful completion of the elective clinical assignment. Prior to such cancellation, the HOSPITAL shall notify the SCHOOL and consult with it about the proposed action.

5. In any situation in which, in the sole opinion of HOSPITAL, a patient's welfare may be adversely affected, HOSPITAL may take immediate corrective measures without prior consultation with SCHOOL, but shall notify SCHOOL immediately thereafter. In any situation not involving patient welfare, in which a student is not performing satisfactorily in the HOSPITAL's opinion, resolution will involve mutual agreement of the parties.

6. While in the HOSPITAL, students will have the status of trainees and are not to replace HOSPITAL staff, and are not to render patient care and/or service except as identified for educational value and delineated in the jointly planned educational program. Any such direct contact between a student and a patient shall be under the supervision of a member of the staff of HOSPITAL.

7. Emergency outpatient treatment will be available to students while in the HOSPITAL for clinical training in the case of accident or illness. However, the HOSPITAL shall not bear the cost of the emergency outpatient treatment.

8. HOSPITAL shall, at the commencement of a student's placement, provide the student a thorough orientation of the HOSPITAL's administrative policies, standards, and practice relevant to the clinical placement.

9. Students participating in this program will be required to complete medical tests and examinations as required by the HOSPITAL.

C. JOINT RESPONSIBILITIES

1. The elective clinical experience will cover a period of time as arranged between the SCHOOL

and HOSPITAL. The beginning dates and length of experience shall be mutually agreed upon by the SCHOOL and the HOSPITAL.

2. The period of time for each student's experience will be mutually agreed upon at least one month before the beginning of the experience.

3. It is agreed by both parties that there shall be no discrimination on the basis of race, religion, creed, sex, national origin or handicap.

4. Methods for evaluating the clinical experience of the students will be developed jointly by SCHOOL and HOSPITAL. Regular communication will be jointly maintained by appropriate SCHOOL and HOSPITAL staff for the purpose of reviewing and evaluating current clinical experiences being offered to students.

5. It is understood and agreed that the parties to this Agreement may revise or modify this Agreement by written amendment when both parties agree to such agreement.

6. Students participating in this program and their parent(s) will be given a copy of this Agreement and required to sign a statement indicating that they agree to its terms and conditions.

**The Evanston Hospital**
**Evanston Township High School**
**St. Francis Hospital**

**Extended Campus Program**

I have been given a copy and have read the agreement between the Hospitals and Evanston Township High School concerning the Extended Campus program and agree to its terms and conditions.

SIGNED,

Student _____

Parent _____

Date _____

EX23B

## PROGRAM RULES & REGULATIONS

Dear Student:

The purpose of the Evanston Hospital/Evanston Township High School Extended Campus Program is to provide you with an introduction to some of the facilities of The Evanston Hospital, to the occupations within these facilities and to some specific tasks associated with each occupation.

As a participant in the program, you will be accorded many of the rights and privileges of our employees. In turn, you will be expected to comply with the Hospitals' policies, practices and procedures. The following will provide you with some rules and regulations which must be followed in order for you to remain in the program.

### Courtesy

The Hospital's primary purpose is to provide thoughtful and prompt service to its patients. As a student participant, one of your most important responsibilities is to be courteous to everyone you work with as well as the patients. The Hospital has many visitors including patients' families and members of the community. These people need our consideration. Please remember that a smile of welcome and a helpful attitude encourage them and help them to feel comfortable.

### Dress

When you are in the Hospital:

1. You must wear your laboratory coat and Hospital identification badge at all times.
2. You cannot wear shorts, short skirts, T-shirts, open-toe shoes or jeans of any type.
3. If you report to the Hospital inappropriately attired, you will be asked to leave.

### General

Students may be suspended from the program for any of the following reasons:

1. Refusing to follow a supervisor's instructions;
2. Falsifying Hospital documents;
3. Divulging confidential Hospital information;
4. Removing or damaging Hospital, patient, visitor or employee property;
5. Threatening or committing a physical injury;
6. Being intoxicated on Hospital premises;
7. Possessing alcohol, drugs or weapons while on Hospital grounds;
8. Soliciting from patients or visitors or any Hospital vendor;
9. Making sexual advances toward patients, visitors or employees;
10. Creating in any manner a serious threat to the safety and health of Hospital staff, patients, visitors or Hospital property;
11. Theft, misappropriation of funds, misuse of services or the unauthorized use of property which belongs to the Hospital, patients, visitors or employees;

12. Gambling (including participation in unauthorized lotteries) while on Hospital grounds;

13. Willful misconduct.

This list of offenses is not intended to be exhaustive of the conduct for which immediate suspension may occur. Any similarly serious misconduct by a student may also warrant immediate suspension.

Special Departmental Rules and Regulations

Included in this material are specific departmental rules and regulations.

If you have any questions regarding these rules and regulations, feel free to contact me or Mr. Likhite for clarification.

Sincerely,

Ronald W. Bryson
Director
Employee Development
Evanston Hospital Corporation

Vivek Likhite
Coordinator
Extended Campus Program
E.T.H.S.

Manager
Training & Development
St. Francis Hospital

LKH:VL:TL/ras
EX34B

Enclosure

# EVANSTON HOSPITAL CORPORATION

## *Expectations for Excellence*

1.

**Break the ice.**

Make eye contact...smile...introduce yourself...call people by name...extend a few words of concern.

2.

**Assist others.**

Stop and try to help...give directions.

3.

**Be courteous.**

Use kind gestures, polite words...make people feel special.

4.

**Explain what you're doing.**

People are always less anxious when they know what's happening.

5.

**Anticipate.**

You'll often know what people want before they have to ask...Act.

6.

**Respond quickly.**

When people are worried or sick, every minute is an hour.

7.

**Respect privacy and confidentiality.**

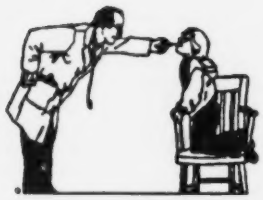
Watch what you say and where you say it...
Show respect...Knock as you enter.

8.

**Handle with care.**

Slow down...give...imagine you're on the receiving end.

(over)



9.

## Take initiative.

Just because it's "Not Your Job" doesn't mean you can't help or find someone who can.

10.

## Treat patients with dignity.

Speak with kindness...be reassuring...recognize the whole person.

11.

## Listen.

If a person complains, don't be defensive.

12.

## Help each other.

Teamwork benefits everyone.

13.

## Show consideration.

Noise annoys!

14.

## Communicate skillfully.

When you're on the phone, our reputation's on the line...sound pleasant...be helpful...listen with understanding.

15.

## Look the part.

Patients and visitors will recognize your professionalism by your appearance.

♦ ♦ ♦ ♦ ♦ ♦

EVANSTON TOWNSHIP HIGH SCHOOL
EXTENDED CAMPUS PROGRAM 1993-1994

Name _____ Date _____ Rotation _____

EXPECTATIONS

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

COMMENTS

EX07B

**EVANSTON TOWNSHIP HIGH SCHOOL**
**EXTENDED CAMPUS PROGRAM**
**Hospital Rotation Dates**
Calendar 1993-1994
Tuesday/Thursday 7:30 a.m. to 9:20 a.m.

School Coordinator: Vivek Likhite 492-7944

Hospital Coordinators: Ronald W. Bryson
Director
Employee Development
Evanston Hospital Corporation

Manager
Training & Development
St. Francis Hospital

PERIOD I

| Tuesday | Thursday |
|---|---|
| 14, September | 23, September |
| 21, September | 30, September |
| 28, September | 07, October |
| 05, October | 14, October |
| 12, October | |
| 19, October | |

PERIOD II

| Tuesday | Thursday |
|---|---|
| 26, October | 28, October |
| 02, November | 18, November |
| 09, November | 02, December |
| 16, November | |
| 23, November | |
| 30, November | |

PERIOD III

| Tuesday | Thursday |
|---|---|
| 07, December | 09, December |
| 14, December | 16, December |
| 04, January | 06, January |
| 11, January | 13, January |
| 18, January | 20, January |

(Winter Recess: December 20-31, 1993)

PERIOD IV

| Tuesday | Thursday |
|---|---|
| 01, February | 03, February |
| 08, February | 10, February |
| 15, February | 17, February |
| 01, March | 24, February |
| 08, March | 03, March |

PERIOD V

| Tuesday | Thursday |
|---|---|
| 15, March | 17, March |
| 22, March | 24, March |
| 29, March | 14, April |
| 12, April | 21, April |
| 19, April | 28, April |
| 26, April | |

(Spring Recess: April 4-8, 1994)

PERIOD VI

| Tuesday | Thursday |
|---|---|
| 03, May | 05, May |
| 10, May | 12, May |
| 17, May | 19, May |
| 24, May | 26, May |

**EVANSTON HOSPITAL - EVANSTON TOWNSHIP HIGH SCHOOL**

**EXTENDED CAMPUS PROGRAM DEPARTMENTAL ROTATIONS 1993-1994**
**NUMBER OF STUDENTS PER ROTATION**

| Rotation | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| Department | | 10/25-12/03 | 12/06-01/21 | 01/31-03/11 | 03/14-04/29 | 05/02-06/03 |
| Clinical Lab | | | | | | |
| Radiology | | | | | | |
| Physical Therapy | | | | | | |
| Occupational Therapy | | | | | | |
| Patient Registration | | | | | | |
| Central Sterile Services | | | | | | |

**EVANSTON HOSPITAL - EVANSTON TOWNSHIP HIGH SCHOOL**

**EXTENDED CAMPUS PROGRAM DEPARTMENTAL ROTATIONS 1993-1994**
**NUMBER OF STUDENTS PER ROTATION**

| Rotation | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| Department | | 10/25-12/03 | 12/06-01/21 | 01/31-03/11 | 03/14-04/29 | 05/02-06/03 |
| Ambulatory Surgery | | | | | | |
| Outpatient Department | | | | | | |
| Cardiac Graphics | | | | | | |
| Radiation Oncology | | | | | | |
| Animal Lab | | | | | | |
| Phlebotomy | | | | | | |

**EVANSTON HOSPITAL - EVANSTON TOWNSHIP HIGH SCHOOL**

**EXTENDED CAMPUS PROGRAM DEPARTMENTAL ROTATIONS 1993-1994**
**NUMBER OF STUDENTS PER ROTATION**

| Rotation | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| Department | | 10/25-12/03 | 12/06-01/21 | 01/31-03/11 | 03/14-04/29 | 05/02-06/03 |
| Nursing | | | | | | |
| Kellogg | | | | | | |

A376E.16

The Evanston Hospital - - Evanston Township High School
Extended Campus Program

# DEPARTMENTAL HEALTH CAREERS

## Cardiac Graphics

EKG Tech I - III
Echocardiography Tech
Special Procedures Tech

## Central Sterile Services (CSS)

CSS Tech I - III
Supply Clerk

## Engineering

| | |
|---|---|
| Maintenance Mechanic | Electrical Shop |
| Shop Assistant | Plumbing Shop |
| Groundsman | HVAC Shop |
| Laborer | Carpentry Shop |
| Painter | |
| Electrician | |
| Plumber | |
| HVAC Tech | |
| Draftsman | |

## Food Services

| | |
|---|---|
| Cook | Cafeteria |
| Dietician | Patient Food Services |
| Dietetic Clerk | Production |
| Dietetic Tech | Catering |
| Nutrition Asst. I - III | Nutrition Services |
| Baker | |
| Secretary | |
| Cashier | |

## Laboratory

| | |
|---|---|
| Lab Assistant | Microbiology |
| | Biochemistry |
| Lab Associate | Hematology |
| | Blood Bank |
| Phlebotomist | Pathology |
| | Immunology |
| Pathologist | Outpatient Phlebotomy |

## Nursing

| | |
|---|---|
| Unit Secretary | Delivery |
| Nursing Assistant | Operating Room |
| Licensed Practical Nurse | ICU/CCU |
| Staff Nurse | Nursery |
| Clinical Specialist | Clinics |
| Clinical Nurse Manager | Emergency |
| Clinical Director | Medical/Surgical |

## Patient Registration

| | |
|---|---|
| | Admitting |
| | Emergency Room |
| | Clinics |
| Patient Rep I - II | Cancer Care Center |
| | Ambulatory Surgery |
| | Central Registration |
| | CAC |
| | Staff Office |

## Physical Therapy

Clerk
Clerk Typist
Secretary
Staff Physical Therapist I - IV

## Radiology

| | |
|---|---|
| Clerk | CT Scan |
| Secretary | File Room |
| Medical Secretary | Angiography |
| Medical Transcriber | |
| Nursing Assistant | |
| Darkroom Tech | |
| X-ray Tech | |
| Special Procedures Tech | |

## Research

## Respiratory Therapy

Respiratory Therapy Tech
Respiratory Therapy Assistant
Critical Care Therapist

EX20B

# CAREERS IN HEALTH CARE

RESPIRATORY THERAPY
BUSINESS SERVICES
OCCUPATIONAL THERAPY
COMMUNICATIONS
MEDICAL RECORDS
SOCIAL WORK
PERFUSION
ADMINISTRATION
EMPLOYEE ASSISTANCE
ADMITTING
VOLUNTEERS
HOME CARE

HUMAN RESOURCES
PUBLIC RELATIONS
ENVIRONMENTAL SERVICES
ACCOUNTING
CENTRAL STERILE SERVICES
AUDIO VISUAL
SPEECH THERAPY
INVITRO FERTILIZATION
PUBLIC SAFETY
QUALITY IMPROVEMENT

UTILIZATION REVIEW
OBSTETRICS/GYNECOLOGY
PHARMACY
ENGINEERING
MATERIAL MANAGEMENT
LINEN SERVICES
STORES & RECEIVING
FINANCE
RADIATION MEDICINE
PURCHASING
PSYCHIATRY
DENTISTRY

PATHOLOGY & LABORATORY MEDICINE
PEDIATRICS
INFORMATION SYSTEMS
FOOD SERVICES
ANESTHESIA
BIOMEDICAL ENGINEERING
RADIOLOGY
PASTORAL CARE
MEDICAL PHYSICS
NURSING
CARDIAC GRAPHICS
EEG EKG

EVANSTON TOWNSHIP HIGH SCHOOL EXTENDED CAMPUS PROGRAM

| | |
|---|---|
| DEPARTMENT: | PATHOLOGY LABORATORIES |
| LOCATION: | D & T, Room 1926A |
| ARRIVAL TIME: | 8:05 a.m. |
| CONTACT PERSON: | |
| RULES AND REGULATIONS: | Same as general Hospital rules |

**EVANSTON TOWNSHIP HIGH SCHOOL EXTENDED CAMPUS PROGRAM**

Job Description

I. GENERAL ORIENTATION

Tour Pathology Department, understand purpose of each section and function of laboratory personnel. Understand necessity of extreme safety precautions.

II. HEMATOLOGY/PHLEBOTOMY

Upon completion of this second session, the student will:

- Understand blood collection tubes, vacutainer system, circulatory system.
- Observe venipuncture and fingerstick technique demonstration.
- Observe blood smear technique.
- Pick out best slides to be stained and demonstrate blood smear.

III. HEMATOLOGY

- Perform stain on preselected blood smears.
- Understand wbc's, rbc's and platelets. Understand how a differential count is done.
- Demonstrate understanding of differentials.
- Observe Kodachromes of normal and abnormal cells.

IV. HEMATOLOGY

- Detection of sickle cell anemia.
- Perform sickle Quik Test
- Determine heterozygous or homozygous positive results and negative results.

V. CHEMISTRY

- Demonstrate understanding of proper pipetting technique.
- Observe dilutions and understandings how to calculate the dilutions.
- Observe spectrophotometer demonstration.
- Read the dilutions prepared in spectrophotometer.
- Compare values obtained.

VI. MICROBIOLOGY

- Examine plates and understand colonial morphology.
- Demonstrate understandings of Gram Stains by staining 3 characteristic colonies.
- Compare colonial morphology with gram stain results.

VII. IMMUNOLOGY

- Understand antigens, antibodies, latex agglutination.
- Perform monospot and/or pregnancy tests.
- Determine positive and negative reactions.

VIII. IMMUNOLOGY/BLOOD BANK

- Understand hemagglutination.
- Observe ABO slide test and understand ABO system.

IX. URINALYSIS/CYTOLOGY/HISTOLOGY

- Understand kidney function and the importance of urinalysis.
- Collect random specimen and understand other collections.
- Demonstrate dipstick and look at microscope.
- Examine slides of tissue from all organs.
- Attend mini-lecture on Cyto/Histo.

X. MICROBIOLOGY

- Learn principles of antibiotic testing for bacteria.
- Perform/set up antibiotic disc—diffusion growth test.
- Accurately determine bacterial growth response as sensitive or resistant to a series of antibiotics.

XI. PRACTICAL AND WRITTEN EXAMS ON PREVIOUS LEARNING SESSIONS

**EVANSTON TOWNSHIP HIGH SCHOOL EXTENDED CAMPUS PROGRAM**

Outline of Responsibilities for E.T.H.S. Students
Phlebotomy Rotation

1. PATIENT REGISTRATION

   - Greeting patients at front desk
   - Directing patients to sign in and be seated
   - Calling patients in as they are seen

2. SPECIMEN PROCUREMENT

   - Directing patients to washroom for urine tests
   - Making sure patients' urine specimens are labeled
   - Directing patients on where to place specimens

3. SPECIMEN TRANSPORT

   - Transporting STAT specimens from Outpatient Lab to Clinical Lab
   - Transporting ASAP specimens from Outpatient Lab to Lab Record Office

4. PATIENT ORIENTATION

   - Directing patients to Central Registration when necessary
   - Directing patients to other labs after completion of Outpatient Lab work when necessary

5. OBSERVATION

   - Observation of outpatient procedures
   - Specimen collection, procedures, etc.

THE EVANSTON TOWNSHIP HIGH SCHOOL
EXTENDED CAMPUS PROGRAM
and
THE EVANSTON HOSPITAL CLINICAL LABORATORY

certifies that

_____

has completed 40 hours of
classroom and clinical instruction
in

# PHLEBOTOMY

| Asst. Vice President<br>Human Resources | Coordinator Extended Campus Program<br>Evanston Township High School | Manager Laboratory Education |
|---|---|---|

Evanston Township High School
Student Evaluation Report
1993-1994

Student Name _____ Student I.D. _____

Counselor _____ Training Area _____

Training Facility _____ Period Covered _____

In each category, place one check mark opposite the phrase which describes the student most accurately.

ABILITY TO FOLLOW INSTRUCTIONS

___ Uses initiative in interpreting and following directions
___ Usually follows instructions with no difficulty
___ Follows instructions with some difficulty
___ Needs repeated detailed instructions

ATTITUDE TOWARD WORK

___ Takes a keen interest in training and takes initiative to learn
___ Shows interest in training and has desire to learn
___ Has some interest in training
___ Shows little interest or enthusiasm for training

HUMAN RELATIONS

___ Extremely tactful and understanding when dealing with all people
___ Usually poised, courteous and tactful in dealing with people
___ Tries to please people
___ Sometimes fails in obligations even under careful supervision

ATTENDANCE AND PUNCTUALITY

___ Never absent or late without good cause
___ Seldom absent or late without good cause
___ Occasionally absent or late
___ Frequently absent or late

APPEARANCE

___ Exceptionally neat and appropriately dressed
___ Neat and appropriately dressed
___ Satisfactory in appearance and dress
___ Sometimes neglectful of appearance and dress

WORK AREA

___ Keeps work area outstandingly neat and efficiently organized
___ Takes pride in appearance and arrangement of work area
___ Follows good housekeeping rules
___ Allows work to become disorganized and untidy

QUALITY OF WORK

___ Has aptitude for doing neat, accurate work and exceeds the requirements
___ Does more than required amount of neat, accurate work
___ Does normal amount of acceptable work
___ Does less than required amount of satisfactory work

JOB SKILLS

___ Possesses all of the essential skills and related information
___ Has an above-average command of the essential skills and related information
___ Has an acceptable command of the skills and related information
___ Lacks in essential skills and related information

COOPERATION

___ Always cooperates eagerly and cheerfully
___ Usually cooperates eagerly and cheerfully
___ Cooperates willingly when asked
___ Cooperates reluctantly

DEPENDABILITY

___ Meets all obligations unfailingly without supervision
___ Meets obligations with very little supervision
___ Meets obligations under careful supervision
___ Sometimes fails in obligations even under careful supervision

OBSERVANCE OF RULES

___ Always observes facility rules
___ Seldom disregards facility rules
___ Observes most of the facility rules
___ Frequently neglects facility rules

OVERALL EVALUATION OF STUDENT'S TRAINING

___ Outstanding
___ Above average
___ Average
___ Below average
___ Poor

HOW WOULD YOU RATE STUDENT'S ABILITY TO BECOME EMPLOYED IN THE TRAINING?

___ Excellent
___ Above Average
___ Average
___ Below average
___ Poor

COMMENTS:

Signature of Rater Date

Signature of Student Date

Signature of Instructor Date

EX33B

**Health Occupations Extended Campus**
**Evanston Township High School**

The Evanston Hospital/St. Francis Hospital

Central Supply

Nursing

Animal Research

X-ray

Respiratory Therapy

Clinical Lab

Health Occupation Extended Campus is a class which gives a high school student the ability to experience the medical field in many new ways. The student goes to the hospital two days out of the week. In the hospital he/she gets to observe some situations and also to help out in others. The student attends either St. Francis or Evanston Hospital.

The remainder of the week is spent in the classroom at E.T.H.S. where the student learns about structures in the human body: human anatomy, phlebotomy and others. The student gets six rotations; he/she gets to choose four on his/her own. The other two rotations are clinical lab and nursing which are mandatory. There are many departments which the student can choose from: animal research, physical therapy, x-ray, phlebotomy, child care and others.

The reason for this class is to try to help the student in choosing a career in the medical field or to even see if the student wants to go into the medical field. In general, this class helps a student develop skill making decisions which are so important when choosing a post-secondary transition plan from high school. It is especially beneficial to the student that hopes to major in the medical field.

My first rotation was in St. Francis Hospital. I was in the central supply department. The central supply department has two main objectives. The first, is to supply most of the other departments with the right equipment and

the second, is to sterilize the many machines and equipment that are used in the hospital by many patients.

The equipment that is cleaned the most are the IV stand, respiratory machines, surgical equipment, and certain syringes. The rest of the equipment is usable only once and is disposed of at the end of its function. Some of the equipment such as the IV stands, are sterilized only by 40% alcohol and distilled water. While on the other hand, surgical equipment, such as knives, are sterilized by steam. Most of the equipment is sterilized by steam.

I had to put a test strip on the equipment that were going into the steam sterilizer to make sure that the equipment was cleaned. At the end of the cleaning cycle, the strip would change to a different color. If it didn't, then the procedure had to be done again.

I also distributed different types of equipment around the hospital to different departments, and I got to know the hospital better. The central supply department is one of the most important departments in the hospital. Without it, the hospital wouldn't operate the way it is suppose to because this is where all the hospital's equipment is stored.

My second rotation was nursing. I was in St. Francis Hospital's cardiac section where I would observe the nurses, and help the patients get out of bed, eat or walk around the corridors. I would see the nurses check the patient's vital

signs such as their temperature, blood pressure and/or weight. Most of the patients that I saw were recovering from by-pass surgery. These patients were extremely weak and could not move very easily.

I spent a lot of time in the Critical Care Unit (CTCU). The Critical Care Unit is a separate room where patients that had surgery are put if their condition gets out of hand. If the patients had high or low blood pressure, or their blood wasn't clotting, or if the doctors thought more care was needed, they would be put into the CTCU. I learned about the different contractions for the heart and how to read a heart monitoring system (EKG). I was taught about the different vessels in the body and about the four chambers in the heart. I witnessed a cardiac arrest emergency code in progress. When I saw all of the doctors and nurses coming out of the room with sad faces, I realized what the medical field is all about. This was my hardest rotation because I saw patients in life-threatening situations, who sometimes didn't make it. However, I know that many patients are helped with today's technology and the professional nurses and doctors which are available to aid these people.

In the third rotation, I was in Evanston Hospital in the Animal Research Department. I learned a lot of things in this department. First, I learned that there is no cruelty to animals that are living in the facility nor in the

research labs. The animals that are in the animal research department are treated even better then they are treated in nature and often live better and longer lives. There are many kinds of animals in this facility; rabbits, rats, mice, dogs, and pigs.

Every morning I would go with my supervisor and do different hands-on-work from checking to feeding the animals. I learned how to restrain rats, rabbits, mice and gerbils. I also learned how to make a medical mixture (tetracycline) for the rabbits and other animals. I went to a satellite station in Glenbrook South. A satellite station is an animal research facility that is controlled by a main animal research facility. I helped in the cleaning of water bottles for drinking. These bottles were washed in boiling water and detergent. The animal facility had to be very clean due to diseases such as bacterial infections and the animal inspection team. All of the food, tests, examinations, and number of animals had to be recorded every day. I saw a surgical procedure done on a pig. The surgery was to test a computer program for a certain machine. The reason why the pig was used was because pigs are most similar to human beings. Because of animal research, there is no longer a very big gap between diagnosis and cure of diseases.

My fourth rotation was in the St. Francis Hospital in the X-ray Department. This department branches into many

departments like ultra-sound, MRI, surgery, portable x-ray, and others. I learned about an upper GI and a lower GI. In an upper GI you view the upper part of the body (esophagus) and in the lower GI you view the lower part of the body (large intestine). There are also x-rays that are taken when a new patient is admitted to the hospital.

In the ultra-sound x-rays there is no longer the danger of ultra-violet radiation like in a regular x-ray and because of this I was able to observe without any danger of being exposed to constant radiation. When I was with the portable team, I went around with the assistant into the Critical Care Units (CCU). The x-rays where taken at the patient's bedside and processed in a special machine. The dark room is a very special aspect in x-rays. The x-ray are viewed by a person in the dark room. If the x-ray is over exposed or under exposed, the viewer will tell the person to retake the same x-ray. Another important part of taking an x-ray is the position of the body part that is being x-rayed. The x-ray department helps many times in determining what is to be done in surgery even before the actual surgery.

My fifth rotation was in the St. Francis Hospital Respiratory Therapy Department. In respiratory therapy, there are different departments such as oxygen round, blood gas lab, and pulmonary functioning. On the oxygen round, I went around to a patient's room and checked his/her oxygen

percentage. The concentration percentage of oxygen differs in patients. It can range from twenty percent to one hundred percent. Most patients oxygen flow usually is under 50 percent.

The blood gas lab is where the blood is tested for abnormalities in the respiratory system. There are three different machines that are used in the blood gas lab. The machines check oxygen ($O_2$), pH, carbon dioxide ($CO_2$), and much more like sodium (Na), and potassium (K). The machines can break down many chemicals in the body and analysis them properly. There are also hemoglobin checks. The results are computerized and distributed throughout the hospital. The blood gas lab also works with the open-heart surgery team and with the emergency unit.

The Pulmonary Unit is testing for problems in the lungs. The test is usually performed under certain conditions. These patients are asked various questions. For example, they are asked: "Did you ever smoke?" "How many packs per day?" "For how long?" "Do you get shortness of breath?" "Are there any recent surgeries?" If the patient answers yes to many of these questions, additional questions were asked.

I was also in the Intensive Care Unit (ICU). I learned about the ventilator machine which helps the patient to breath. There were different isolations to protect the patients and the care givers so as not to transmit any

foreign substances to either one.

My sixth rotation was Evanston Hospital's Clinical Lab Unit. I heard lectures by medical technologists and I learned about the white blood cells, the red blood cells, and the platelets. I got to personally test bacteria and learned how to read the results. I tested things such as throat smears, urine, and the reading of germ stains.

I found it interesting that there were so many labs in this section of the hospital which are divided into two main parts. There is the clinical aspect which is looking for bacteria and there is the anatomic aspect which is looking into the body. Autopsies are also studied in the anatomical part of the lab. I saw the following labs: 1) the microbiology lab which is where specimens are checked out like urine, sputum, and stool; 2) the specimen lab where checking for diseases such as TB are made; 3) the fungal growth lab grows different types of lab bacteria; and 4) the biochemistry lab which looks for answers to problems in chemical structure.

One of the things that I learned how to do was to identify different bacteria by tests like the germ stain, blood smears, and more. There are four steps to the staining procedure. They are: 1) Crystal violet; 2) Gram's iodine; 3) Acetone; and 4) Safranin. I learned the different effects of staining on the individual cells. The most vital to identifying a bacteria is find its

species.

The Health Occupations Extended Campus program has given me a great chance to have hands-on experience which I would not of had in the classroom. The experience that I have received at St. Francis and Evanston Hospital was a good way to see if I would feel positive about the medical field in general. It has been a positive experience for me even though it was difficult at times to witness the loss of life. The classroom part of this program was very intense and well designed for a high school setting. I know that this program will interact well with my college choices and with my life in particular. It has been a rewarding aspect of my high school experience.

**Health Occupations Extended Campus**
**Evanston Township High School**

**The Evanston Hospital/St. Francis Hospital**

**Occupational Therapy**

**Nursing**

**Cardiac Graphics**

**Clinical Lab**

**Animal Research**

**Radiology**

**Submitted in partial fulfillment of the requirements of**
**Health Occupations Extended Campus Honors,**
**at Evanston Township High School, Evanston, Illinois**

**May 25, 1993**

**Danielle Merkel**
**436500**
**Cooper**

The Health Occupations Extended Campus program between Evanston Township High School, The Evanston Hospital, and St. Francis Hospital is a extraordinary and enlightening experience. This program allows high school juniors and seniors to learn, hands-on, about various jobs the medical field has to offer, and aids them in making important decisions regarding their future profession. Students enrolled in this program report to either The Evanston Hospital or St. Francis Hospital on Tuesdays and Thursdays, where they work and learn for two hours in various departments throughout the hospital. Students rotate through six rotations, each for a six-week period, in six different departments. They are required to complete both nursing and clinical lab rotations, but may choose from a variety of other departments for their remaining four rotations. They may choose from departments such as occupational therapy, cardiac graphics, animal research, and radiology. When not working at one of the hospitals, students attend class at Evanston Township High School, where they learn about a variety of medical-oriented subjects, ranging from anatomy to diseases to phlebotomy. Whatever rotation the students choose, they experience what it is like to be part of a hospital staff. This program is an excellent opportunity for students to gain precious insight into the human life and the technology that goes into trying to preserve it.

For my first rotation, I was in occupational therapy. Occupational therapy's major concern is rehabilitation exercises

for patients who have suffered a stroke, an amputation, major trauma due to a serious accident, or joint replacement. Therapists help patients relearn how to dress, eat, and perform washroom activities with the use of apparatus designed for those task. I spent a majority of this rotation following a therapist as she went room to room giving therapy sessions to the patients. One thing I noticed with all of the patients was that they were all motivated to improve. I think a lot of this motivation came from the fact that the therapists were very patient and had positive attitudes. I was also able to attend a few in-services. At these in-services, one therapist would lecture the other therapists on a subject, usually related to rehabilitation, that they knew about. During this rotation, I learned what I consider to be the most important trait - patience.

I was in nursing in the Women's Hospital for my second rotation. The Women's Hospital is a place for mothers to recuperate after they have had their baby. The nurses on this floor are responsible for a variety of duties. They must check their patient's and their patient's baby's vital signs every day, as well as bring water and other necessities, change soiled linens, and take care of the babies in the nursery. While in this rotation, I made beds and delivered water to all the patients. By doing these activities, I not only saved the nurses a lot of work, but I also got an opportunity to speak to the patients. I was also allowed to observe three circumcisions, and then the steps involved in caring for the wound as the nurse explained them to the mother. I was amazed at the gentleness, yet swiftness with which the nurses

performed their tasks.

My third rotation was in cardiac graphics. There are many tests involved in cardiac graphics - stress tests, ECG, Holter exams, and ECHO tests - all of which I was able to observe. Some days during this rotation, I watched the stress tests, while on others, I was up on the floors. When I went up on the floors with the technicians, I learned how to type in the patient's information and hook up the electrodes. What I really liked about this rotation was the contact I had with the patients. I enjoyed listening to the stories they would tell and answering the questions they asked about the program and myself. It made me feel that just by saying "hi" as I went by a room, or by listening to them, I made their day better. I also noticed that all of the technicians explained to the patients how the test would work and what they were doing at that moment. I think this made the patients feel much more relaxed.

For my fourth rotation, I was in the clinical lab. In this particular rotation, I got to do a lot of hands-on work. Each day, a student technician would teach the group of HOEC students a different lab test. We learned how to perform certain tests, such as a Gram stain procedure (to test for bacteria that is usually colorless in nature), and a SickleQuik test (to test for sickle cell anemia), and even a urinalysis test using a dipstick (to test for specific chemical reactions in a patient). Most of the time, we were able to perform the tests and analyze the results ourselves. At the end of the rotation, we had a written exam and a lab practical. I had a really good time in this rotation because

I was able to learn about the test by actually performing them and learning what went wrong first-hand. The student technicians who taught us were very patient (there's that extremely useful quality again) and wanted to make sure that we really knew what we had learned instead of us just saying that we understood. Without this department, doctors would not know what was wrong with their patients and how to treat them.

I spent my fifth rotation down in the sub-basement in animal research. This was by far my favorite rotation. I was taught how to handle the different animals (rabbits, rats, mice, and dogs) and how they are taken care of. I was also lucky enough to be able to observe a lab. During this lab, doctors from the hospital practiced performing operations using microscopic cameras, which allowed them to see what they were doing inside the body on a video screen, and instruments which allowed them to work through small incisions instead of large ones, which are more traumatic to the body. This lab, and labs similar to it help doctors perfect their techniques and what works or doesn't work. By being in this rotation, a lot of my views about the use of animals for research were changed. I learned that the animals are treated in a very humane way and came to realize that if it were not for research, our medical knowledge would be so limited we would have to learn from trial and error.

My final rotation of the year was in radiology. I observed a lot of the different tests this department runs, such as lower GIs (which uses a barium enema), CT scans, and MRIs. I learned that for some of the tests, a dye is injected to help the organs and

soft tissues show up better. While I was in CT and MRI, I was able to see the brain, the abdomen, and the neck. I was amazed at how clear all of the pictures showed up and how well the problem can be identified with these pictures. On a test being run to check for the spread of cancer in a patient, I was shown an image of the tumorous area before and after the fat suppression, which causes the fat in the image to show up lighter and the tumor(s) to show up brighter, making them easier to identify.

Because of the Health Occupations Extended Campus program, I have learned a lot, not only about the medical field, but also about myself. I have always believed that I want to go into the medical field, but by being in this program, I have come to realize that I definitely want to spend the time, however long it may be, studying to enter a profession in the medical field. This program has made me aware of the many job opportunities there are in the medical field, and has allowed me to test the waters with a lot of them. I hope that this program has as great an effect on other students as it has had on me. I believe it is a great opportunity to test limitations and abilities, as well as desire.